

WHAT IS CLAIMED IS:

1. A method of performing financial processing in one or more computers, comprising:

5 (a) selecting accounts, amounts and rates from account data stored in a database using selection criteria specified by one or more rules; and

(b) performing one or more Future Value (FV) calculations on the selected accounts by applying one or more FV attrition rules to the selected accounts using the selected amounts and rates, wherein the FV calculations determine a present value of an expected profitability of additional products that may be purchased.

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2. The method of claim 1, wherein the step of performing the FV calculations comprises applying propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules.

15 3. The method of claim 1, wherein the FV is a possible future profitability value.

4. The method of claim 1, wherein the selected accounts contain current profitability values.

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5. The method of claim 4, wherein the current profitability data is aggregated to provide an initial amount for the FV calculations.

25 6. The method of claim 1, wherein the selected amounts are forecast amounts.

7. The method of claim 1, wherein the selected rates are FV attrition rates.

30 8. The method of claim 1, wherein a user specifies one or more forecast periods over which the FV calculations are performed.

9. The method of claim 8, wherein a user specifies one or more rates for the forecast periods.

10. The method of claim 1, wherein the step of applying the FV attrition rules
5 comprises:

matching the FV attrition rule to the selected accounts;
matching results of a FV propensity rule to the matched accounts;
obtaining an attrition rate for the matched accounts;
calculating an effective attrition rate for each forecast period from the attrition
10 rate and a net change rate defined in the FV attrition rule for each forecast period;
performing the FV attrition rule to calculate an FV expected value from the
effective attrition rate and a propensity rule amount defined in the FV attrition rule; and
storing the FV amount.

11. The method of claim 1, wherein the FV attrition rate comprises a Constant
(no compounding) method according to:

$$\text{Amount}_i = \text{Amount}_0 * (1 + R_0) * ((k - j + 1) / 12)$$

20 Amount_i = calculated amount by forecast period,
 Amount_0 = initial amount,
 R_0 = initial rate,
 i = forecast period,
 j = first month in a forecast period, and
25 k = last month in a forecast period.

12. The method of claim 1, wherein the FV attrition rate comprises a Constant
(with compounding) method according to:

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$$\text{Amount}_i = \text{Amount}_0 * (1 + R_m)^i * ((k - j + 1) / 12)$$

Amount_i = calculated amount by forecast period,

Amount₀ = initial amount,

R_m = monthly rate,

i = forecast period,

5 j = first month in a forecast period, and

k = last month in a forecast period.

13. The method of claim 1, wherein the FV attrition rate comprises an Additive (no compounding) method according to:

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$$\text{Amount}_i = \text{Amount}_0 * (1 + i * (R_0 / 12)) * ((k - j + 1) / 12)$$

Amount_i = calculated amount by forecast period,

Amount₀ = initial amount,

15 R₀ = initial rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period.

20 14. The method of claim 1, wherein the FV attrition rate comprises an Additive (with compounding) method according to:

$$\text{Amount}_i = \text{Amount}_0 * (1 + \text{Compounded_Rate} * ((k - j + 1) / 12))$$

25 Amount_i = calculated amount by forecast period,

Amount₀ = initial amount,

i = forecast period,

j = first month in a forecast period,

k = last month in a forecast period, and

30 Compounded_Rate = Rate₁ * Rate₂ * ... * Rate_i.

15. The method of claim 1, wherein the FV attrition rate comprises a Manual (no compounding) method according to:

$$\text{Amount}_i = \text{Amount}_0 * (1 + R_{\text{man}}) * ((k - j + 1) / 12)$$

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Amount_i = calculated amount by forecast period,

Amount_0 = initial amount,

R_{man} = manual rate,

i = forecast period,

10 j = first month in a forecast period, and

k = last month in a forecast period.

16. The method of claim 1, wherein the FV attrition rate comprises a Manual (with compounding) method according to:

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$$\text{Amount}_i = \text{Amount}_0 * (1 + \text{Compounded_Rate} * ((k - j + 1) / 12))$$

Amount_i = calculated amount by forecast period,

Amount_0 = initial amount,

20 i = forecast period,

j = first month in a forecast period,

k = last month in a forecast period, and

$\text{Compounded_Rate} = \text{Rate}_1 * \text{Rate}_2 * \dots * \text{Rate}_i$.

25 17. The method of claim 1, wherein the FV attrition rate comprises a Constant method according to:

$$\text{Amount}_i = \text{Amount}_0$$

30 Amount_i = calculated amount by forecast period, and

Amount₀ = initial amount.

18. The method of claim 1, wherein the FV attrition rate comprises a Negative Compounding method according to:

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Amount_i = Initial Forecast Amount * (Attrition Rate * (1 - Attrition Rate)ⁿ)

Amount_i = calculated amount by forecast period,

Amount₀ = initial amount,

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i = forecast period, and

n = amortization term.

19. A system for performing financial processing, comprising:
one or more computers;

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logic, performed by the computers, for:

(a) selecting accounts, amounts and rates from account data stored in a database using selection criteria specified by one or more rules; and

(b) performing one or more Future Value (FV) calculations on the selected accounts by applying one or more FV attrition rules to the selected accounts using the selected amounts and rates, wherein the FV calculations determine a present value of an expected profitability of additional products that may be purchased.

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20. The system of claim 19, wherein the logic for performing the FV calculations comprises logic for applying propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules.

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21. The system of claim 19, wherein the FV is a possible future profitability value.

22. The system of claim 19, wherein the selected accounts contain current profitability values.

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23. The system of claim 22, wherein the current profitability data is aggregated to provide an initial amount for the FV calculations.
- 5 24. The system of claim 19, wherein the selected amounts are forecast amounts.
25. The system of claim 19, wherein the selected rates are FV attrition rates.
- 10 26. The system of claim 19, wherein a user specifies one or more forecast periods over which the FV calculations are performed.
27. The system of claim 26, wherein a user specifies one or more rates for the forecast periods.
- 15 28. The system of claim 19, wherein the logic for applying the FV attrition rules comprises:
- logic for matching the FV attrition rule to the selected accounts;
 - logic for matching results of a FV propensity rule to the matched accounts;
 - 20 logic for obtaining an attrition rate for the matched accounts;
 - logic for calculating an effective attrition rate for each forecast period from the attrition rate and a net change rate defined in the FV attrition rule for each forecast period;
 - logic for performing the FV attrition rule to calculate an FV expected value from
 - 25 the effective attrition rate and a propensity rule amount defined in the FV attrition rule;
 - and
 - logic for storing the FV amount.
29. The system of claim 19, wherein the FV attrition rate comprises a
- 30 Constant (no compounding) method according to:

$$\text{Amount}_i = \text{Amount}_0 * (1 + R_0) * ((k - j + 1) / 12)$$

Amount_i = calculated amount by forecast period,

Amount₀ = initial amount,

5 R₀ = initial rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period.

10 30. The system of claim 19, wherein the FV attrition rate comprises a Constant (with compounding) method according to:

$$\text{Amount}_i = \text{Amount}_0 * (1 + R_m)^i * ((k - j + 1) / 12)$$

15 Amount_i = calculated amount by forecast period,

Amount₀ = initial amount,

R_m = monthly rate,

i = forecast period,

j = first month in a forecast period, and

20 k = last month in a forecast period.

31. The system of claim 19, wherein the FV attrition rate comprises an Additive (no compounding) method according to:

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$$\text{Amount}_i = \text{Amount}_0 * (1 + i * (R_0 / 12)) * ((k - j + 1) / 12)$$

Amount_i = calculated amount by forecast period,

Amount₀ = initial amount,

R₀ = initial rate,

30 i = forecast period,

j = first month in a forecast period, and
k = last month in a forecast period.

32. The system of claim 19, wherein the FV attrition rate comprises an
5 Additive (with compounding) method according to:

$$\text{Amount}_i = \text{Amount}_0 * (1 + \text{Compounded_Rate} * ((k - j + 1) / 12))$$

10 Amount_i = calculated amount by forecast period,
Amount₀ = initial amount,
i = forecast period,
j = first month in a forecast period,
k = last month in a forecast period, and
Compounded_Rate = Rate₁ * Rate₂ * ... * Rate_i.

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33. The system of claim 19, wherein the FV attrition rate comprises a Manual
(no compounding) method according to:

$$\text{Amount}_i = \text{Amount}_0 * (1 + R_{\text{man}}) * ((k - j + 1) / 12)$$

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Amount_i = calculated amount by forecast period,
Amount₀ = initial amount,
R_{man} = manual rate,
i = forecast period,
25 j = first month in a forecast period, and
k = last month in a forecast period.

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34. The system of claim 19, wherein the FV attrition rate comprises a Manual
(with compounding) method according to:

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$$\text{Amount}_i = \text{Amount}_0 * (1 + \text{Compounded_Rate} * ((k - j + 1) / 12))$$

Amount_i = calculated amount by forecast period,

Amount_0 = initial amount,

5 i = forecast period,

j = first month in a forecast period,

k = last month in a forecast period, and

$\text{Compounded_Rate} = \text{Rate}_1 * \text{Rate}_2 * \dots * \text{Rate}_i.$

10 35. The system of claim 19, wherein the FV attrition rate comprises a
Constant method according to:

$$\text{Amount}_i = \text{Amount}_0$$

15 Amount_i = calculated amount by forecast period, and

Amount_0 = initial amount.

36. The system of claim 19, wherein the FV attrition rate comprises a
Negative Compounding method according to:

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$$\text{Amount}_i = \text{Initial Forecast Amount} * (\text{Attrition Rate} * (1 - \text{Attrition Rate})^n)$$

Amount_i = calculated amount by forecast period,

Amount_0 = initial amount,

25 i = forecast period, and

n = amortization term.

37. An article of manufacture embodying logic for performing financial
processing in one or more computers, the logic comprising:

(a) selecting accounts, amounts and rates from account data stored in a database using selection criteria specified by one or more rules; and

(b) performing one or more Future Value (FV) calculations on the selected accounts by applying one or more FV attrition rules to the selected accounts using the
5 selected amounts and rates, wherein the FV calculations determine a present value of an expected profitability of additional products that may be purchased.

38. The article of claim 37, wherein the step of performing the FV calculations comprises applying propensity rules to the selected accounts and applying
10 the attrition rules to results of the propensity rules.

39. The article of claim 37, wherein the FV is a possible future profitability value.

15 40. The article of claim 37, wherein the selected accounts contain current profitability values.

41. The article of claim 40, wherein the current profitability data is aggregated to provide an initial amount for the FV calculations.

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42. The article of claim 37, wherein the selected amounts are forecast amounts.

43. The article of claim 37, wherein the selected rates are FV attrition rates.

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44. The article of claim 37, wherein a user specifies one or more forecast periods over which the FV calculations are performed.

45. The article of claim 44, wherein a user specifies one or more rates for the
30 forecast periods.

46. The article of claim 37, wherein the step of applying the FV attrition rules comprises:

- matching the FV attrition rule to the selected accounts;
- matching results of a FV propensity rule to the matched accounts;
- 5 obtaining an attrition rate for the matched accounts;
- calculating an effective attrition rate for each forecast period from the attrition rate and a net change rate defined in the FV attrition rule for each forecast period;
- performing the FV attrition rule to calculate an FV expected value from the effective attrition rate and a propensity rule amount defined in the FV attrition rule; and
- 10 storing the FV amount.

47. The article of claim 37, wherein the FV attrition rate comprises a Constant (no compounding) method according to:

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$$\text{Amount}_i = \text{Amount}_0 * (1 + R_0) * ((k - j + 1) / 12)$$

Amount_i = calculated amount by forecast period,

Amount_0 = initial amount,

R_0 = initial rate,

20 i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period.

48. The article of claim 37, wherein the FV attrition rate comprises a Constant
25 (with compounding) method according to:

$$\text{Amount}_i = \text{Amount}_0 * (1 + R_m)^i * ((k - j + 1) / 12)$$

Amount_i = calculated amount by forecast period,

30 Amount_0 = initial amount,

R_m = monthly rate,

i = forecast period,
j = first month in a forecast period, and
k = last month in a forecast period.

5 49. The article of claim 37, wherein the FV attrition rate comprises an Additive (no compounding) method according to:

$$\text{Amount}_i = \text{Amount}_0 * (1 + i * (R_0 / 12)) * ((k - j + 1) / 12)$$

10 Amount_i = calculated amount by forecast period,
Amount₀ = initial amount,
R₀ = initial rate,
i = forecast period,
j = first month in a forecast period, and
15 k = last month in a forecast period.

50. The article of claim 37, wherein the FV attrition rate comprises an Additive (with compounding) method according to:

20 Amount_i = Amount₀ * (1 + Compounded_Rate * ((k - j + 1) / 12)

Amount_i = calculated amount by forecast period,
Amount₀ = initial amount,
i = forecast period,
25 j = first month in a forecast period,
k = last month in a forecast period, and
Compounded_Rate = Rate₁ * Rate₂ * ... * Rate_i.

51. The article of claim 37, wherein the FV attrition rate comprises a Manual
30 (no compounding) method according to:

$$\text{Amount}_i = \text{Amount}_0 * (1 + R_{\text{man}}) * ((k - j + 1) / 12)$$

Amount_i = calculated amount by forecast period,

Amount_0 = initial amount,

5 R_{man} = manual rate,

i = forecast period,

j = first month in a forecast period, and

k = last month in a forecast period.

10 52. The article of claim 37, wherein the FV attrition rate comprises a Manual
(with compounding) method according to:

$$\text{Amount}_i = \text{Amount}_0 * (1 + \text{Compounded_Rate} * ((k - j + 1) / 12))$$

15 Amount_i = calculated amount by forecast period,

Amount_0 = initial amount,

i = forecast period,

j = first month in a forecast period,

k = last month in a forecast period, and

20 $\text{Compounded_Rate} = \text{Rate}_1 * \text{Rate}_2 * \dots * \text{Rate}_i.$

53. The article of claim 37, wherein the FV attrition rate comprises a Constant
method according to:

25 $\text{Amount}_i = \text{Amount}_0$

Amount_i = calculated amount by forecast period, and

Amount_0 = initial amount.

54. The article of claim 37, wherein the FV attrition rate comprises a Negative Compounding method according to:

$$\text{Amount}_i = \text{Initial Forecast Amount} * (\text{Attrition Rate} * (1 - \text{Attrition Rate})^n)$$

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Amount_i = calculated amount by forecast period,

Amount_0 = initial amount,

i = forecast period, and

n = amortization term.

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